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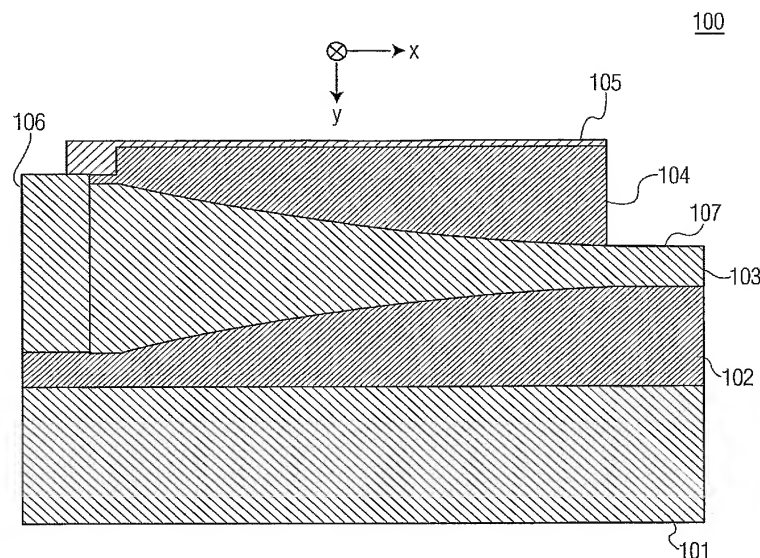
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(54) Title: TAPERED UNIT CELL METAL-OXIDE-SEMICONDUCTOR HIGH-VOLTAGE DEVICE STRUCTURE



(57) Abstract: A field effect electronic device (e.g., an FET) includes a field plate disposed over a dielectric layer, which is disposed over a semiconductor layer, wherein a drift region of the device is in the semiconductor layer. A doping level varies substantially non-linearly across the drift region, and the device exhibits a substantially constant reduced surface electric field. A method of fabricating a field effect device includes providing a non-linear non-uniform doping density in a drift region of a semiconductor layer of the device wherein both the semiconductor layer and the dielectric layer have non-constant thickness.

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